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Dear energy codes community,

We are living in an exciting time when building energy codes are being given greater focus and greater importance. While this increased scrutiny and heightened expectations for energy code development, adoption, and enforcement can add an element of stress to our everyday lives, the increased attention given to our work in the community reminds me how much we all truly make a difference.

We've even hit the mainstream. A recent *Rolling Stone* article, "The Secretary of Saving the Planet," listed cutting energy consumption in buildings first in a list of five ways Secretary of Energy Steven Chu "...plans to get us off fossil fuels and build a cleaner, greener world." Of course, building energy efficiency is currently in the spotlight due, in great part, to the \$787 billion American Recovery and Reinvestment Act.

The Recovery Act provides a significant opportunity for the energy codes community to really shine. Signed into law in February 2009, it focuses on stimulating the nation's economy through public-sector spending and tax credits, with a heavy emphasis on infrastructure and energy. The Recovery Act allocates billions of dollars to the U.S. Department of Energy's (DOE's) Office of Energy Efficiency and Renewable Energy. And a substantial portion of this funding is set aside to support state building energy efficiency projects and provide various tax incentives.

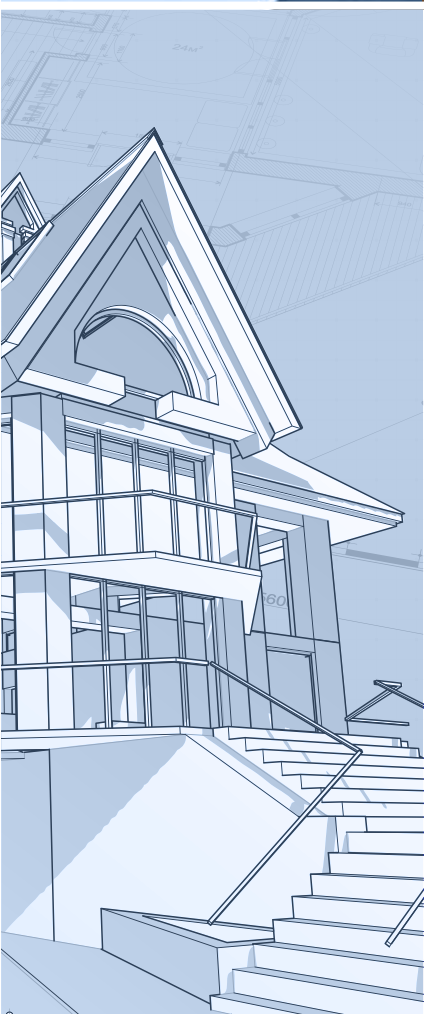

**Jean Boulin, Program Manager**  
U.S. Department of Energy

The specific details about dollar allocations and activities will be provided by DOE upon completing its review of proposals for funding from across the nation. For now, this supplement to the Building Energy Codes Program's (BECP's) quarterly newsletter, *Setting the Standard*, prepared especially for **Energy Codes 2009** attendees, summarizes what details about the Recovery Act of interest to the energy codes community are available so far as well as how BECP is helping states get the most out of the Recovery Act.

Remember, in our line of work less—**Less Energy. Less Cost. Less Carbon.**—truly is more.

It is a pleasure saving energy with you,

**Jean J. Boulin**  
Program Manager  
U.S. Department of Energy

## Where is the Money Going?

### State Energy Program = \$3.1 billion

Through the State Energy Program (SEP), states can obtain American Recovery and Reinvestment Act grants and direct funding that do not require matching state funds. Comprehensive applications were due in May and reviewed by the U.S. Department of Energy (DOE). As of July 1<sup>st</sup>, DOE had authorized more than \$2.9 billion in SEP grants.

Each state and jurisdiction's eligibility for SEP grants and direct funding is dictated by code adoption and enforcement requirements. According to the Financial Assistance Funding Opportunity Announcement, the state, or the applicable units of local government that have authority to adopt building codes, will implement the following.

#### Adopt the most recent International Energy Conservation Code® (IECC) for residential buildings

States must implement a residential building code (or codes) that meets or exceeds the most recent IECC—currently the 2009 IECC—or achieves equivalent or greater energy savings.

#### Adopt Standard 90.1-2007 for commercial buildings

States must implement a commercial building energy code (or codes) throughout the state that meets or exceeds the ANSI/ASHRAE/IESNA<sup>1</sup> Standard 90.1-2007, or achieves equivalent or greater energy savings.

#### Demonstrate 90% compliance within 8 years

States must implement a plan to achieve 90% compliance with the above energy codes within eight years. This plan will include active training and enforcement programs and annual measurement of the rate of compliance.

### Energy Efficiency and Conservation Block Grant = \$3.2 billion

States, local governments, Indian tribes, and U.S. territories can obtain Recovery Act-funded Energy Efficiency and Conservation Block Grants (EECBG) to improve energy efficiency and install renewable energy systems. Eligible activities include building codes and inspections to promote building energy efficiency. Nonprofits and governmental agencies may also use these grants for performing energy-efficiency retrofits and developing energy-efficiency and conservation strategies. EECBG is part of the Energy Independence Act of 2007.

Visit [http://apps1.eere.energy.gov/wip/block\\_grants.cfm](http://apps1.eere.energy.gov/wip/block_grants.cfm) for more details.

#### Note on Recovery Act reference to residential target codes

Recovery Act SEP conditions specify a compliance measurement against the most recent IECC, or equivalent, for residential buildings.

Thus, the 2009 IECC is the target code against which the Recovery Act compliance requirement will be measured for residential buildings. The 2009 IECC was not referenced directly in the Recovery Act because it was still being acted on when the legislation was drafted.

<sup>1</sup> The American National Standards Institute/American Society of Heating, Refrigerating and Air-Conditioning Engineers/Illuminating Engineering Society of North America

#### Recovery Act SEP grants authorized as of July 1, 2009

State	SEP Grant \$	Montana	\$25,855,000
Alabama	\$55,570,000	Nebraska	\$30,910,000
Alaska	\$28,232,000	Nevada	\$34,714,000
Arizona	\$55,447,000	New Hampshire	\$25,827,000
Arkansas	\$39,416,000	New Jersey	\$73,643,000
California	\$226,093,000	New Mexico	\$31,821,000
Colorado	\$49,222,000	New York	\$123,110,000
Connecticut	\$38,542,000	North Carolina	\$75,989,000
Delaware	\$24,231,000	North Dakota	\$24,585,000
Florida	\$126,089,000	Ohio	\$96,083,000
Georgia	\$82,495,000	Oklahoma	\$46,704,000
Hawaii	\$25,930,000	Oregon	\$42,182,000
Idaho	\$28,572,000	Pennsylvania	\$99,684,000
Illinois	\$101,321,000	Rhode Island	\$23,960,000
Indiana	\$68,621,000	South Carolina	\$50,550,000
Iowa	\$40,546,000	South Dakota	\$23,709,000
Kansas	\$38,284,000	Tennessee	\$62,482,000
Kentucky	\$52,533,000	Texas	\$218,782,000
Louisiana	\$71,694,000	Utah	\$35,362,000
Maine	\$27,305,000	Vermont	\$21,999,000
Maryland	\$51,772,000	Virginia	\$70,001,000
Massachusetts	\$54,911,000	Washington	\$60,944,000
Michigan	\$82,035,000	West Virginia	\$32,746,000
Minnesota	\$54,172,000	Wisconsin	\$55,488,000
Mississippi	\$40,418,000	Wyoming	\$24,941,000
Missouri	\$57,393,000	<b>TOTAL</b>	<b>\$2,932,915,000</b>

Source: [www.energy.gov/recovery](http://www.energy.gov/recovery)

### Recovery Act provisions and tax incentives of potential benefit to building sector

The Recovery Act also modifies and expands the scope of many energy efficiency and renewable energy tax incentives. Specifically, it extends consumer incentives through 2010 and increases the cap on efficiency incentives from \$500 to \$1,500 per household.

Provisions, including tax incentives, that could bring opportunities to the building sector follow.

- » **Tax credits** for the production of renewable energy are extended until at least 2012.
- » **Research expenses** associated with renewable, conservation, and carbon capture and sequestration could result in higher credits in 2009 and 2010.
- » **DOE is authorized to provide grants** up to 30% of the cost of installation of items such as fuel cells, solar, small wind, geothermal heat pumps, and combined heat and power systems.
- » **The DOE Office of Energy Efficiency and Renewable Energy** is receiving \$21.4 billion for research, weatherization assistance, grants, and other programs.
- » **The Department of Labor** is allocated \$750 million for job training, with significant focus on emerging industry sectors, including energy efficiency and renewable energy.
- » **Federal agencies** are allocated considerable funds for retrofitting and upgrading existing facilities to meet Federal energy and water-use requirements and alleviate any maintenance backlogs.

An overview of the legislative changes and details on the individual measures can be found on the Tax Incentives Assistance Project website, [www.energysiteincentives.org](http://www.energysiteincentives.org).



# BECP is Helping States Qualify

## Strawman

The Building Energy Codes Program (BECP) is offering support for energy code-related provisions in the Recovery Act, with a major focus on helping states prepare to meet the compliance requirement. This includes developing guidelines and tools for measuring and reporting compliance with building energy codes in each of the states.

## BECP is helping states meet Recovery Act provisions

In March, BECP developed and distributed a State Compliance Evaluation document—referred to as the Strawman—to stakeholders for their review and feedback. The Strawman identified BECP's preliminary plans for supporting the 90% requirement, including the processes and tools BECP anticipates developing to assist states in demonstrating achievement of the compliance target. A second Strawman draft, which incorporates feedback received from a number of stakeholders, including energy advocates and state and local government, was more widely distributed for review in June.

Learn more about the Strawman and access the full document at [www.energycodes.gov/news/arra/compliance\\_evaluation.stm](http://www.energycodes.gov/news/arra/compliance_evaluation.stm).

BECP anticipates making the following information and tools available on the Code Compliance Portal, though some of the features may have restricted access.

- » **Links to compliance studies**, both past studies and those resulting from this effort
- » **Metrics collected** from onsite evaluations by jurisdiction and aggregated to provide regional and national summaries
- » **Results from process surveys** conducted by jurisdictions
- » **Onsite evaluation checklists** for various building-use types and climates
- » **Tools for generating** appropriate random samples
- » **Downloadable PDF files** containing much of the information described above.

## Compliance tools & support

As BECP is continuing to receive feedback on its plans from states and other stakeholders, the potential collection of materials and other resources will likely evolve.

In the meantime, BECP staff are pushing ahead to incorporate support for the 2009 IECC into BECP's code-compliance software, REScheck™ by Fall 2009. Support for Standard 90.1-2007 is already available in COMcheck™. Additional 2009 IECC-related training and support materials will be available in the near future.

Moving forward, BECP's efforts will focus on those tools identified as most useful to the states in their efforts to implement the provisions of the Recovery Act. In addition, BECP plans to conduct pilot tests in up to five geographic regions, with emphasis on testing a range of different scenarios.

DOE anticipates Recovery Act funds being provided to several organizations across the U.S. to support further development and implementation of building energy codes over the next 18 to 24 months.

## DOE Launches Recovery Act Clearinghouse

The U.S. Department of Energy (DOE) has developed a Recovery Act Clearinghouse to help increase the availability of information about DOE's Recovery Act activities. The Clearinghouse will provide initial consultations and make referrals to other information sources as appropriate. Interested parties can submit questions to the Clearinghouse using an online submission form at <https://recoveryclearinghouse.energy.gov> or toll-free by phone at 1-888-DOE-RCVY (1-888-363-7289).

## Procedures to measure compliance

BECP understands it won't be easy for states to determine their rate of compliance with energy codes. To help uniformly address this, BECP is developing procedures that states can readily apply to measure and report compliance. These procedures will be made available to states as they begin to address the energy-code-related provisions of the Recovery Act. They will include:

- » Guidance for home rule states and states with codes other than the target codes
- » Informational sheets on approaching the jurisdiction prior to the onsite evaluations
- » Guidelines for developing a random sample of jurisdictions and buildings within those jurisdictions
- » Recommended certification for those conducting the onsite evaluations
- » Training materials for onsite evaluators
- » Guidelines for conducting a plan check on the selected buildings
- » Guidelines for conducting an onsite building evaluation on the selected buildings
- » Inspection checklists to be used by evaluators performing the onsite inspections
- » Guidelines for derivation of the overall state compliance metric
- » Training materials for the target codes and to address specific code infractions
- » Guidelines for meeting the annual measurement requirements
- » Suggestions for additional information-gathering opportunities that might be afforded by this effort
- » Questions for evaluating administrative and permitting/inspection processes of the jurisdiction and guidelines for collecting and using that information.

## Potential training opportunities

After developing inspection checklists that support Recovery Act compliance evaluations, BECP will provide training materials to inspectors/evaluators to go over inspection basics and familiarize them with using the checklists to complete their evaluations.

Training materials on ANSI/ASHRAE/IESNA Standard 90.1-2007 and the 2009 International Energy Conservation Code® (IECC) are currently available through BECP. BECP will also develop materials to support Standard 90.1-2010. Planned materials include a PowerPoint® presentation with instructor notes, inspection videos, and a certification exam.

BECP will also provide training and materials to address common problem areas that arise along the way, including:

- » Published answers to FAQs
- » Code Notes for provisions in need of further clarification
- » PowerPoint files and webcasts.



*BECP: Building a foundation to help states meet Recovery Act requirements*

## Training & support materials

BECP anticipates developing automated and paper tools to assist states in implementing the Recovery Act State Energy Program (SEP) requirements. An online compliance "portal" will be developed to provide states access to these materials. The portal will also be a collection point for compliance metrics, to be stored in a national compliance database, which will allow states to review the activities of other states and to track state, regional, and national trends. The compliance portal and associated database will:

- » **Assist with communication** of activities and lessons learned across states
- » **Provide access to tools** and documents
- » **Help make sure that compliance efforts** are consistently applied
- » **Provide an opportunity** to consolidate results of studies into regional and national metrics.

The U.S. Department of Energy (DOE) has received American Recovery and Reinvestment Act funds to aggressively promote energy efficiency in our nation's buildings.

DOE's Building Energy Codes Program will allocate a portion of this funding toward preparing the energy codes community to implement commercial building energy codes that require a 30% improvement in energy efficiency over Standard 90.1-2004 in the 2010 version.



## IRS Modifies Tax Credit for Efficiency Improvements

As of June 1, 2009, the Internal Revenue Service has modified the Federal income tax credit for energy-efficiency home improvements to include new requirements for window and door fenestration ratings. From June 1, 2009 to December 31, 2010, windows and doors in all climate regions will have to meet the 0.30 maxima for both U-factor and Solar Heat Gain Coefficient (SHGC). For more information, visit [www.energystar.gov/index.cfm?c=products.pr\\_tax\\_credits#s1](http://www.energystar.gov/index.cfm?c=products.pr_tax_credits#s1).

## Recovery Act FAQ: Radiant Barriers and the Tax Credit

**Q** Is radiant barrier insulation covered by the tax credit?

**A** Radiant barriers are not defined in the 2009 IECC, and therefore could become ineligible for the 30% tax credit, depending on how the IRS interprets the language in its forthcoming guidance. The Recovery Act added the following language that requires the insulation product to meet the prescriptive contained criteria in the 2009 IECC.

*"...any insulation material or system which is specifically and primarily designed to reduce the heat loss or gain of a dwelling unit when installed in or on such dwelling unit, and meets the prescriptive criteria for such material or system established by the 2009 International Energy Conservation Code, as such Code (including supplements) is in effect on the date of the enactment of the American Recovery and Reinvestment Act of 2009."*

The ENERGY STAR® program has set up a Q&A on this topic, and will provide updates if the status changes. Go to [www.energystar.gov](http://www.energystar.gov), click on FAQ, and search for radiant barriers for more information.

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More information about DOE Energy Efficiency and Conservation Block Grants, Weatherization Programs, and State Energy Programs is available at <http://apps1.eere.energy.gov/wip/>.

Learn more about BECP's Recovery Act-related activities, and resources at [www.energycodes.gov](http://www.energycodes.gov).

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**U.S. Department of Energy**  
**Energy Efficiency and Renewable Energy**  
Bringing you a prosperous future where energy is clean, abundant, reliable, and affordable

*Setting the Standard* is published by the Building Energy Codes Program of the U.S. Department of Energy Office of Energy Efficiency and Renewable Energy at the Pacific Northwest National Laboratory. Its purpose is to encourage information exchange among building industry professionals and organizations, state and local code officials, and researchers to facilitate timely development and early adoption of the building energy conservation standards. The Building Energy Codes Program would like to continue sending you information about energy codes and compliance tools, but if you would like your name removed from our contacts list, go to [www.energycodes.gov/unsubscribe.stm](http://www.energycodes.gov/unsubscribe.stm). Send comments and contributions to Loel Kathmann at Pacific Northwest National Laboratory ([techsupport@becp.pnl.gov](mailto:techsupport@becp.pnl.gov)).

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[www.energycodes.gov/support](http://www.energycodes.gov/support)

### A Strong Energy Portfolio for a Strong America

Energy efficiency and clean, renewable energy will mean a stronger economy, a cleaner environment, and greater energy independence for America. Working with a wide array of state, community, industry, and university partners, the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy invests in a diverse portfolio of energy technologies.